

# Massive subcutaneous emphysema

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## RESUMEN

El enfisema subcutáneo es una condición que se presenta frecuentemente con mínima o nula sintomatología, pero que en ocasiones puede complicarse por la interferencia que produce la acumulación de aire a la mecánica respiratoria. Se ilustra un cuadro de enfisema subcutáneo que involucra cara, cuello, pneumomediastino y disección del tejido que une a los grandes vasos.

**Palabras clave.** Enfisema, mesotelioma, fasciotomía.

## ABSTRACT

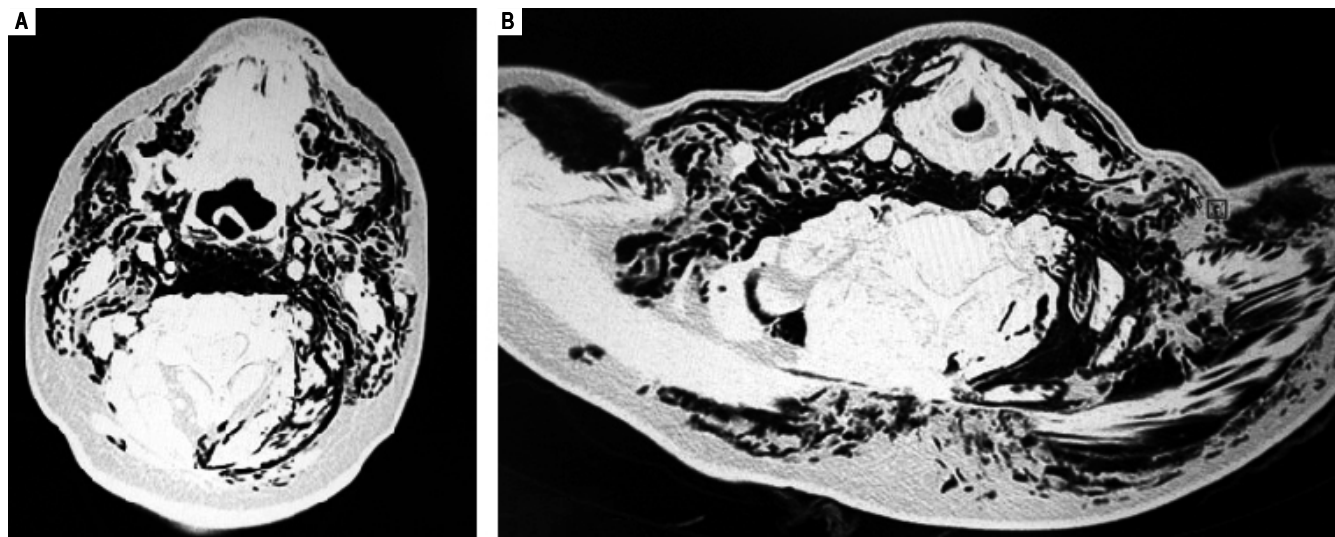
*Subcutaneous emphysema is a condition that presents often minimal symptoms, but sometimes it presents itself as a potential risk for complications due to accumulation of air that interferes with respiratory mechanics. In this image we illustrate subcutaneous emphysema involving face, neck, pneumomediastinum and dissection of the tissue among the great vessels.*

**Key words.** Emphysema, mesothelioma, fasciotomy.

## MASSIVE SUBCUTANEOUS EMPHYSEMA

A 60-year-old man presented to the emergency department with acute facial edema and dyspnea.

The patient had a history of malignant mesothelioma previously treated with chemotherapy, radiotherapy and left hemi-diaphragm resection a month prior to his admission. On physical examination he had



**Figure 1.** Massive subcutaneous emphysema (A) face (B) neck.

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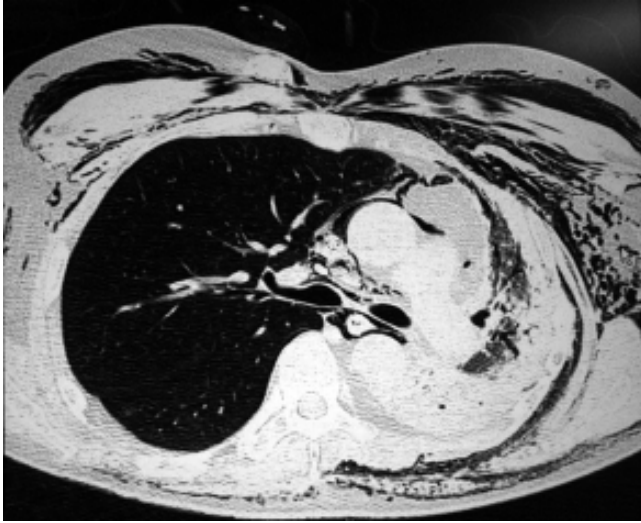
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**Figure 2.** Subcutaneous emphysema and dissection of the tissue among the great vessels.

swelling of the face, neck, upper extremities and thorax, also presenting crepitation over the same areas.

Computed tomography scan revealed a massive subcutaneous emphysema involving face, neck structures (Figure 1) and dissection of the thoracic wall muscles; as well as pneumomediastinum with dissection of the tissue among the great vessels (Figure 2). A subcutaneous left-subclavicular puncture was made and a Heimlich valve was placed obtaining general improvement. Three days later he started with sudden dyspnea, recurrent swelling and chest pain secondary to the valve's dysfunction. A valve replacement and a left subclavicular fasciotomy were performed. Two weeks later there was no evidence of emphysema so the valve was withdrawn and the patient sent home for subsequent follow up.

Subcutaneous emphysema is a condition that presents itself often with minimal symptoms, but sometimes it can be severe because of the potential risk for complications due to accumulation of air that could interfere with the respiratory mechanics and obstructing venous reflux. In this particular case, the cause was attributed to a pleural fistula.